CLAIMS

1. A computer automated process for analysing and interpreting engineering drawings in CAD file format wherein a central processing unit which is operatively coupled to a storage means, a memory means, an input means and an output means operating in accordance with a predefined set of instructions analyses drawings and interprets symbols, graphical elements and textual information from the drawing to determine the relationship between the symbols, graphical elements and textual information to provide a quantitative analysis of the graphical elements and to further provide three dimensional reconstruction of the drawings and further provide an interpretation of the data from the drawings in accordance with a predetermined formula and wherein all predefined instructions to operate the central processing unit and all predefined algorithms and instructions and formulae to analyse and interpret the engineering drawings are stored in the storage means.

2. A process as claimed in claim 1 above wherein the central processing unit scans each individual drawing to identify all graphical and textual information and symbols contained within the drawing and to further identify the shape, dimension and the spatial location of each graphical element and the position of all symbols and text in the drawings and wherein such information is stored in the storage means for further analysis.

3. A process as claimed in claim 2 above wherein the central processing unit scans each graphical element in every drawing and compares each graphical element with known patterns stored in the storage means and wherein if the patterns are the same as or within predefined limits as the pattern in the storage means the central processing unit identifies the graphical element and records the position of each graphical element and stores the same in the storage means.

4. A process as claimed in claim 3 above wherein the central processing unit identifies the symbols contained in the drawing by comparing the symbols in the drawings

with known patterns stored in the storage means and wherein if the patterns are the same as or within predefined limits as the pattern in the storage means the central processing unit identifies the symbol and the position of the symbol is determined in relation to the surrounding graphical elements.

5. A process as claimed in claim 4 above wherein the central processing unit identifies the text contained in the drawing by comparing the text in the drawings with known patterns stored in the storage means and wherein if the patterns are the same as or within predefined limits as the pattern in the storage means the central processing unit identifies the text and the position of the text is determined in relation to the surrounding graphical elements.

6. A process as claimed in claim 5 above wherein the central processing unit identifies the meaning of each of the graphical elements in the drawings by analysing each graphical element together with any symbols and text associated with the graphical element and the position of the graphical element in accordance with predefined algorithms stored in the storage means.

7. A process as claimed in claim 6 above wherein the central processing unit interprets the relationship between different graphical elements and determines the size shape position and dimension of each graphical element by analysing the textual information and symbols which are connected to or are within predefined limit of proximity to the graphical element and determining the size and dimension of each graphical element in accordance with predefined algorithms stored within the storage means.

8. A process as claimed in claim 7 above wherein the central processing unit locates all information and data relevant to each graphical elements from all relevant drawings in accordance with a predefined set of instructions which is stored in the storage means and wherein such information is stored in the storage means.

9.   A process as claimed in claim 8 above wherein the central processing unit determines the quantity and engineering meaning of each graphical element in each drawing in accordance with a predetermined formula stored within the storage means.